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Some Observations
on the Fauna of the Maldivé Islands

PART III—BIRDS

BY

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(*With two plates*)

[*Continued from Vol. 55 (1) : 10*]

INTRODUCTION

The ornithology of the Maldivé archipelago is not well known for few collectors or observers have visited the islands. The only previous list of birds was that made by Gadow & Gardiner in 1903 when 24 species were recorded, some of them by sight identification. During the period December 1956 to February 1957 one of us (W.W.A.P.) visited Malé, the capital, and North Malé Atoll when 128 birds were collected and many observations made. This report gives the results of that visit. Specimens representing 39 species are listed (25 of them being new records) and another 17 species (14 new records) were seen by, or reported to, W.W.A.P. Thus the number of birds recorded from the Maldivé archipelago is increased from 24 to 63 species. In addition, two new races have been distinguished and described (Phillips and Sims, 1958). The collection has been presented to the British Museum (Natural History).

Lying between Latitude 8°N. to 1°S. and longitude 72° to 74°E. the Maldivé archipelago extends over an area of 470 miles from north to south and 70 miles east to west at its widest, with its capital about 400 miles south-west of Ceylon. It is composed of groups of islands and reefs which form an incomplete double chain of 19 coral atolls resting on a submerged mountain range. Depths of over 2,000 fathoms have

been recorded in the open seas adjacent to the atolls but 20 to 30 fathoms are usual within the reefs. The Maldive archipelago lies between two other archipelagoes in a north to south line. To the north, linked by the island of Minicoy between the 8° and 9° channels, is the Laccadive archipelago, while 300 to 400 miles to the south of the most southerly atoll of the Maldives, Addu Atoll, is the Chagos archipelago.

The climate is tropical being governed by the two monsoons, the South-west Monsoon lasting from about April to August and the North-east Monsoon from approximately October to February. The rain brought by the monsoon winds is ample and is well distributed throughout the archipelago.

The scattered islands forming the atolls are all fairly small and low-lying, being seldom more than six feet above sea-level ; many have swamps and miniature lagoons in their interiors. Over 2,500 of these islands have been counted but less than 220 are permanently inhabited by man. Most of the larger have had coco-nut palms planted in the coral sand amongst the low scrub and succulent-leaved undergrowth, while a few large evergreen trees, mostly introduced, grow around swamps and villages.

The human population, estimated at between 85,000 and 90,000, is chiefly dependent upon fishing for a livelihood (especially for bonito from which 'Maldive fish' is made) and partly on the manufacture of copra and coir rope from the coco-nut palms. The islanders live almost exclusively on rice and fish but will eat any bird that has webbed, or semi-webbed, feet. Other birds are often snared and kept as 'pets' for, being strict Moslems, dogs are banned and the children have few toys (although kite-flying is a national pastime). Several specimens in this present collection were brought in by fishermen and others from the more northerly atolls and outlying reefs for sale alive in the market at Malé. Malé Island, situated in North Malé Atoll in the centre of the archipelago, is about one mile long and half a mile wide, with a population of over 8,000 people. Owing to the difficulties of travel in the Maldives most of our observations were made and specimens collected on North Malé Atoll. Additional information was obtained from Mr. Ibrahim Didi who has travelled throughout the Archipelago and, being a reliable observer, a reasonable degree of accuracy can be credited to the identifications of species and to the dates of their arrivals and departures that he has furnished.

ACKNOWLEDGEMENTS

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and Mr. Norman Costar, C.M.G., the Acting High Commissioner for Ceylon, who facilitated arrangements and contributed in so many ways to the success of the visit. We are indebted also to many friends in Malé and specially to Mr. Ibrahim Didi, interpreter and constant companion, who provided not only the Maldivian names of all birds collected or seen but gave much extremely valuable information on the distribution and movements of the various species. To Mr. William Perera, taxidermist and collector, who accompanied the expedition from Colombo, go thanks for his excellent work in preparing the specimens. Grateful acknowledgement for help and advice is also made to Mr. J. D. Macdonald, British Museum (Natural History), and lastly the contribution made by Mrs. Paddy Phillips, who always cheerfully put up with so many hardships, contributed, more than any one else, to the success of the expedition.

MIGRATION

Knowledge of bird migration in the Maldives is restricted chiefly to the evidence provided by specimens in the present collection, information gathered from Maldivian islanders, and a few personal observations of W.W.A.P. Migration in the Archipelago is represented almost solely by the arrival of comparatively small numbers of non-breeding visitors and stragglers during October to December with the north-east winds; then, during the following March and April with the onset of the South-west Monsoon, their return northwards. Of the 37 species listed as visitors all but 4 can be placed in this category, two exceptions being non-breeding and the other two breeding visitors. The non-breeding exceptions are two species of the family Procellariidae (a shearwater and *Oceanites oceanicus*); these breed in the southern hemisphere during the southern summer and spend their non-breeding months, i.e. from April to October during the southern winter, in the warmer, tropical seas. The breeding visitors are two species of oceanic terns (*Sterna anaethetus* and *S. fuscata*) that, according to local reports, resort to the islands to breed during March, April, and May after which they return to their pelagic life.

Of the 33 species that visit the Maldives 28 represent non-passerine families: 4 Ardeidae, 2 Anatidae, 4 Falconidae, 6 Charadriidae, 10 Scolopacidae, 1 Strigidae, and 1 Apodidae. Apart from their variable numbers these visitors call for little comment. They arrive annually throughout October, November, and December, then return northwards during the following March and April. It is probable that their route to the Maldives passes down the west coast of India, southwards through the Laccadives, then finally to the northern atolls of the Maldives by way of Minicoy. From local reports it appears that most of these species are more common towards the north of the Archipelago than in the south, so

it seems that for many the northern atolls of the Maldives are at the southern limit of their range. On North Malé Atoll, situated about midway along the Archipelago, however, many waders, such as *Numenius p. phaeopus*, *Tringa nebularia*, and *Arenaria interpres*, are common throughout the northern winter.

Although the passerine migrants are few in number, five species representing only two families (Hirundinidae and Motacillidae), they are the more interesting of the non-breeding visitors. The pattern of migration is largely the same as that of other visitors in dates of arrival and departure, but the migration is on a smaller scale with greater fluctuations in numbers. During the period of the visit by W.W.A.P. swallows (*Hirundo rustica gutturalis*) were frequently observed with the maximum of three seen in one day. The House Martin (*Delichon urbica*), however, was not seen although Gadow and Gardiner reported that it was plentiful during the latter's visit. Three pipits were recorded, one female of *Anthus t. trivialis* and one male of *A. cervinus* being collected. These pipits were seen around the playing fields and on the foreshore feeding grounds. Local informants reported that some years these birds may arrive in moderate numbers but they always depart southwards after a brief stay of a few hours to a day or so. Their destination is unknown.

Unfortunately, the Yellow Wagtail (*Motacilla flava*) was not observed during the visit but one was, curiously enough, during the homeward voyage from Colombo to Tilbury via Capetown. On 10 April 1957, when the ship was about latitude 1° 13" S. and longitude 73° 37" E., i.e. about 45 miles south of Addu Atoll and 320 miles north of the Chagos archipelago, a Yellow Wagtail came on board. It was in the fresh breeding plumage of a male with a bright grey-blue crown and a white superciliary stripe (probably either *flava* or *beema*). As this bird was observed in April it is probable that it was moving northwards; it would be unlikely that during the South-west Monsoon it would be blown out to sea southwards from the Maldives. The presence of the bird in this area would appear to indicate then the possibility of occasional birds passing between the Maldives and the Chagos archipelagoes. Unfortunately we have a negligible knowledge of the birds of the Chagos islands, but this wagtail may provide a clue for future investigation into migration to that archipelago. The fact that the pipits continue southwards after their brief stay on North Malé Atoll lends support to this claim for the desirability for research into the avifauna of the Chagos archipelago.

CHECK-LIST OF THE BIRDS OF THE MALDIVE ARCHIPELAGO

<i>Breeding Species</i>	<i>Non-breeding Species</i>	<i>Species of Uncertain status</i>
R—Resident V—Visitor	N—Northern winter visitor S—Southern winter visitor	
PROCELLARIIDAE		
<i>Procellaria lherminieri bailoni</i> (R)	<i>Procellaria</i> sp. (S) <i>Oceanites oceanicus</i> (S)	
PHAETHONTIIDAE		
<i>Phaëthon lepturus lepturus</i> (R)		
SULIDAE		
		<i>Sula leucogaster</i> <i>Sula dactylatra</i>
FREGATIDAE		
<i>Fregata ariel iredalei</i> (R)	<i>Fregata minor</i> (N)	
ARDEIDAE		
<i>Ardea cinerea rectirostris</i> (R) <i>Butoroides striatus albidulus</i> (R) <i>Butoroides striatus didii</i> (R)	<i>Ardeola ibis coromanda</i> (N) <i>Ixobrychus cinnamomeus</i> (N) <i>Dupetor f. flavicollis</i> (N)	<i>Egretta garzetta</i>
ANATIDAE		
	<i>Anas crecca</i> (N) <i>Aythya fuligula</i> (N)	
FALCONIDAE		
	<i>Circus macrourus</i> (N) <i>Circus pygargus</i> (N) <i>Circus aeruginosus</i> (N) <i>Falco t. tinnunculus</i> (N)	
RALLIDAE		
<i>Amaurornis phoenicurus maldivus</i> (R) <i>Gallicrex cinerea</i> (R)		
CHARADRIIDAE		
	<i>Chettusia gregaria</i> (N) <i>Squatarola squatarola</i> (N) <i>Pluvialis dominica fulva</i> (N) <i>Charadrius hiaticula tundrae</i> (N) <i>Charadrius mongolus atrifrons</i> (N) <i>Charadrius leschenaulti</i> (N)	
SCOLOPACIDAE		
	<i>Numenius phaeopus phaeopus</i> (N) <i>Numenius arquata</i> (N) <i>Limosa l. lapponica</i> (N) <i>Tringa totanus eurhinus</i> (N) <i>Tringa nebularia</i> (N) <i>Tringa glareola</i> (N) <i>Actitis hypoleucos</i> (N) <i>Arenaria interpres</i> (N) <i>Capella stenura</i> (N) <i>Erolia minuta</i> (N)	<i>Capella gallinago</i>
DROMADIDAE		
		<i>Dromas ardeola</i>

CHECK-LIST OF THE BIRDS OF THE MALDIVE ARCHIPELAGO—(Contd.)

Breeding Species	Non-breeding Species	Species of Uncertain status
R—Resident V—Visitor	N—Northern winter visitor S—Southern winter visitor	
<hr/>		
LARIDAE		
<i>Sterna dougalli korustes</i> (R)		<i>Gelochelidon n. nilotica</i>
<i>Sterna sumatrana mathewsi</i> (R)		
<i>Sterna albifrons saundersi</i> (R)		<i>Hydroprogne caspia</i>
<i>Sterna anaethetus</i> (V)		
<i>Sterna fuscata</i> (V)		
<i>Thalasseus bergii velox</i> (R)		<i>Thalasseus bengalensis</i>
<i>Gygis alba</i> (R)		<i>Anous stolidus pileatus</i>
		<i>Anous tenuirostris</i>
PSITTACIDAE		<i>Psittacula calthropae</i>
CUCULIDAE		
<i>Eudynamys s. scolopacea</i> (R)		
STRIGIDAE	<i>Asio f. flammeus</i> (N)	
APOPIDAE	<i>Collocalia brevirostris</i> (N)	
HIRUNDINIDAE	<i>Hirundo rustica gutturalis</i> (N)	
	<i>Delichon urbica</i> (N)	
MOTACILLIDAE	<i>Anthus t. trivialis</i> (N)	
	<i>Anthus cervinus</i> (N)	
	<i>Motacilla flava</i> (N)	
CORVIDAE		
<i>Corvus splendens maledivicus</i> (R)		

ANNOTATED LIST OF THE BIRDS OF THE MALDIVE
ARCHIPELAGO

In this report, with few exceptions, the nomenclature and the sequence of families, genera, and species follow Phillips (1953). The Maldivian name for each species is given in parenthesis after the English name.

Procellaria lherminieri bailloni Bonaparte : Audubon's Shearwater. (Hoogula)

2 ad. ♂, 3 ad. ♀, 1 ? juv., North Malé Atoll, January 1957.

Gadow and Gardiner (1903) identified the Maldivian shearwaters as *persicus* Hume (from the coasts of Persia and India) but the present series



Nest-burrow of Audubon's Shearwater *Procellaria herminieri bailloni*. North Malé Atoll



Tracks in sand, reputed to be made by Audubon's Shearwater *Procellaria herminieri bailloni* when visiting nest-burrow at night. North Malé Atoll

Photos : W. W. A. Phillips



Brown Booby *Sula leucogaster*



Longtailed Tropic-bird *Phaethon lepturus lepturus*,
juvenile

match specimens of the race of Audubon's Shearwater from the Seychelles both in size and colour. These birds are somewhat smaller, particularly in the length of the bill, than those of the more northerly occurring *persicus*; also *bailloni* differs in the grey of the neck extending to the sides of the breast. The differences between these taxa are slight and seem to indicate a close relationship, so we propose that *persicus* Hume should be regarded no longer as a monotypic species but as a race of *P. lherminieri*.

Measurements (in millimetres) of *Procellaria lherminieri*

	Sex	Bill (Nostril to tip)	Wing
<i>bailloni</i>			
Maldives	2♂	21	195, 197
	3♀	21-22	185-198
Seychelles	1♂	21 ^{app}	181
	2♀	22, 23	189, 197
Reunion	1♂	21	worn
<i>persicus</i>			
Aden	1♂	25	210
Mekran coast	1?	25	199
Bombay (Colaba)	1♂	26	210
	1?	25	199
Trivandrum*"	1?	27	worn

We wish to thank the Bombay Natural History Society for their kindness in lending specimens of *persicus* taken near Bombay and Trivandrum from their collections.

It is curious that Maldivian shearwaters (or even the Indian race) have not yet been recorded in Ceylon. Occasional reports would be expected from off the coasts of individuals from this breeding colony on the Maldives or of injured or exhausted birds being washed ashore on the west coast during the South-west Monsoon.

All the present specimens were taken at the breeding burrow (the unsexed juvenile is unfledged). The breeding sites in the Maldivian archipelago are reported to be widely scattered along the eastern sides of the islands in all the atolls; burrows being particularly numerous on small, uninhabited, scrub-covered islets. The nest burrows are mostly within 20 feet of the shore and scraped out of the sand beneath roots of the scrub. The birds visit the burrows only at night, usually between midnight and 4 a.m.

In addition to the unfledged juvenile taken from a burrow on 26th January a single, slightly incubated, white egg measuring 49 × 35 mm. was taken from another burrow on 31st January. Gadow and Gardiner

*Sálim, Ali, 1953

(1903) reported that burrows contained eggs and young on 29th December. It would appear, therefore, that the breeding season is protracted, possibly throughout the cooler weather. Indeed, the islanders state that breeding continues throughout the whole year and we see no reason to doubt their statement as they take birds, young and old, and eggs for food.

Resident.

Procellaria sp. (Bodu-Hoogula)

The islanders report that large dark shearwaters which they name Bodu-Hoogula are often plentiful on the open seas around the atolls during the South-west Monsoon (April to October) but they do not come inside the reefs. As both the Greenbilled Shearwater, *P. pacificus*, and the Pinkfooted Shearwater, *P. carneipes*, occur regularly on the seas between the Maldives and Ceylon either, or both, could be the species observed.

Southern winter visitor.

Oceanites oceanicus (Kuhl) : Wilson's Petrel. (Kurangee)

New record. Large numbers of these petrels are reported to be present at times in the seas surrounding the atolls during the South-west Monsoon (April to October). Like the large shearwaters they remain outside the reefs where they are frequently caught by fishermen when they land on the boats. One was identified at sea, somewhat less than 100 miles east of the archipelago, on 28 November 1956.

Phaëthon lepturus lepturus Daudin : Longtailed Tropic-bird. (Dande fulu-doonie)

1♀, Tambrudu Island, North Malé Atoll, January 1957.

Gadow and Gardiner reported that this species bred on Mahlosmadulu Atoll where an adult, nestling, and egg were collected on 24th November. On 9 January 1957, a fully fledged juvenile, but still with some down, was brought in from Tuladu Island in South Mahlosmadulu Atoll, and a larger bird, too young to fly, was also brought from there on 15th January. Breeding in the Maldives appears, therefore, to take place during the cool weather from November to January and to be centred around South Mahlosmadulu Atoll. On Malé an occasional bird was heard calling and seen flying around the island and the neighbouring reefs.

Resident.

Sula leucogaster (Boddaert) : Brown Booby. (Mardoonie)

New record. A captive Brown Booby was photographed in February 1957 by W.W.A.P. The bird had been caught on a fishing line five months previously on Fadipollu Atoll. Others were seen near the

Cassanfaru Reef, North Malé Atoll. The species appears to be moderately plentiful in some areas in the archipelago but no information could be obtained of its breeding.

Status uncertain.

Sula dactylatra Lesson : Masked Booby. (Mardoonie)

New record. Two of these gannets were seen while our ship was stranded on the Cassanfaru Reef on the north-eastern aspect of North Malé Atoll. None was seen afterwards nor could any information be obtained regarding the status of the species.

Status uncertain.

? ***Fregata minor*** (Gmelin) : Frigate Bird. (Hora)

New record. Large, all-black frigate birds were seen over Malé on four occasions during December 1956, and January 1957. They appeared to be too large and dark for *F. ariel*, and with black abdomens were not *F. andrewsi*, so it is likely that they were *F. minor*.

Mr. Ibrahim Didi stated that frigate birds regularly appear over Malé during the cooler weather of the North-east Monsoon.

Northern winter visitor.

Fregata ariel iredalei Mathews : Lesser Frigate bird. (Hora)

2♀, Tuladu Island, Mahlosmadulu Atoll, January 1947.

Gadow and Gardiner recorded that this species bred on Mahlosmadulu Atoll during October and November. It is reported locally to breed only on the more northerly atolls.

Roosting frigate birds are captured in the palm trees and sold alive in the markets for food.

Resident.

Ardea cinerea rectirostris Gould : Eastern Common Heron. (Makana)

1♀, Malé, North Malé Atoll, December 1956.

This species is plentiful throughout the Maldives ; Gadow and Gardiner found it especially numerous on Mahlosmadulu Atoll. Herons are always to be seen on the reefs at low tide searching for eels. At high water they may be seen flying from reef to reef or, more usually, resting on breakwaters, trees, or palms. On Malé they are moderately tame and allow a close approach. Two partially fledged juveniles were brought in on 9th December, then on 4th January five empty nests were found in small bushy trees overlooking a lagoon, further on 15th January a down-covered nestling was also found. The breeding season appears to last from November, possibly October, to January or later. Although

these herons are not captured for food, young birds are often taken from the nest and reared as pets.

Resident.

Butorides striatus didii : Phillips & Sims : Paler Maldivian Little Heron. (Rabonde)

2 adult ♂, 2 immature ♂, 3 adult ♀, Malé Island ; 1 adult ♂, Willing-gillie Island ; 1 adult ♀, Hulule Island ; 1 immature ♂, Gardu Islet, North Malé Atoll, December 1956 and January 1957.

The race *didii* was separated on this series as the birds are markedly paler than birds of the more southerly occurring race, *albidulus*, also the crown is streaked (Phillips & Sims, 1958). The Little Heron is plentiful on the beaches and around the swamps of the central and northern atolls of the Maldives. The call is a short, sharp yelp.

Nests were found during December and January ; these are simple saucers, or platforms, of small sticks and twigs placed among the foliage on the horizontal branches of low bushy trees growing near the beach. Two well incubated eggs found on 2nd December were a rather pale green with a chalky appearance and measured 39×29 and 40×29 mm. respectively. Two quarter-grown nestlings were found on 16th January.

Resident.

Butorides striatus albidulus Bangs : Darker Maldivian Little Heron. (Rabonde or Rabulli).

This race is known only from the unique type collected on Suvadiva Atoll in the southern Maldives.

Resident.

Ardeola ibis coromanda (Boddaert) : Cattle Egret. (Irruwar Hudu)
2♂, Diffuri Island, North Malé Atoll, December 1956, January 1957.

New record. Cattle egrets are reported to be regular visitors arriving in small flocks of about 15 or so during October and November. They leave again during the following March and April after some of them have assumed the orange and buff breeding plumes. During their stay they usually remain in small flocks on the coral shores or reefs. The present specimens were snared by fishermen.

Northern winter visitor.

Egretta garzetta (Linnaeus) : Little Egret

Gadow and Gardiner recorded one bird on Hedufuri, South Mahlosmadulu Atoll and that two were seen in captivity on Huludu, Addu Atoll. This species was not seen by W.W.A.P. nor were there any local reports of it.

Status uncertain.

Ixobrychus cinnamomeus (Gmelin) : Chestnut Bittern.

1♂, Toddu Islet, west of Malé Island, North Malé Atoll, December 1956.

New record. Regarded as a very occasional visitor during the North-east Monsoon.

Irregular northern winter visitor.

Dupetor flavicollis flavicollis (Latham) : Black Bittern. (Karlur Rabonde)

2♂, Malé, North Malé Atoll, December 1956 ; Willinggillie Island, North Malé Atoll, January 1957.

New record. Small numbers arrive singly about December and stay during the remainder of the North-east Monsoon. They frequent scrub covered islets where they feed on the shores at low tide.

Northern winter visitor.

Anas crecca Linnaeus : Common Teal. (Ratu-rairu)

Gadow and Gardiner recorded that this species was reported from various parts of the Maldives. It was not encountered by W.W.A.P. but information was received of small flocks of up to ten being seen occasionally on the southern reef of Malé Island during the North-east Monsoon. It is considered to be more plentiful on islands with fresh or brackish water lagoons.

Northern winter visitor.

Aythya fuligula (Linnaeus) : Tufted Duck. (Rairu)

New record. Two adult females that had been snared were brought in alive to W.W.A.P. and were examined by him. They came from a small flock that frequented the southern reef of Malé Island in November. Tufted duck are reported to visit the reefs occasionally during the North-east Monsoon.

Irregular northern winter visitor.

Circus macrourus (S. G. Gmelin) : Pallid Harrier. (Bazzu)

This species was reported without comment by Gadow and Gardiner. It was not seen by W.W.A.P. but reports were gathered of it visiting the islands in varying numbers during the North-east Monsoon. It is possible that the islanders may confuse this species with *C. pygargus* although both may visit the islands.

? Northern winter visitor.

Circus pygargus (Linnaeus) : Montague's Harrier. (Bazzu)

This species was reported without comment by Gadow and Gardiner. (See note on *C. macrourus*).

Northern winter visitor.

Circus aeruginosus (Linnaeus): Marsh Harrier. (♂ Bazzu, ♀ Ahunda)

New record. A bird in adult male plumage was seen in the interior of Hulule Island, North Malé Atoll, on 26 December 1956. This was the only harrier observed during the visit although this species is reported to visit Malé regularly during the North-east Monsoon when it takes many domestic fowls.

Northern winter visitor.

Falco tinnunculus tinnunculus (Linnaeus): European Kestrel. (Sirumuthi)

1♀, Hulule Island, North Malé Atoll, February 1957.

Gadow and Gardiner collected two specimens but gave no information. Several Kestrels were seen on Hulule Island, including an adult male on 17 January 1957. They were reported to visit the Maldives annually in moderate numbers during the North-east Monsoon. They appear to feed only on insects and *Calotes* lizards.

Northern winter visitor.

Amaurornis phoenicurus maldivus Phillips & Sims: Maldivian Waterhen. (Cumbilli)

3♂, 1♀, 1 juvenile, Hulule Island, December 1956; 1 juvenile ♀, Willinggillie Island, December 1956; 1♂, 1♀, Himmafuffi Island, January 1957; 1 juvenile ♂, Gardu Islet, North Malé Atoll, January 1957.

The race *maldivus* was separated mainly on the greater extent of white on the forehead and the more slaty coloured backs of the birds of this series in comparison with a series of *phoenicurus* Pennant (Phillips and Sims, 1958). The species is moderately plentiful on most of the larger islands throughout the Archipelago. It is an elusive skulking bird living amongst the undergrowth near the beach or around swampy areas; frequently it is seen along the reefs at low tide searching for food. Many birds appear to have become entirely terrestrial and, except during the rainy weather, live away from freshwater and feed on the outskirts of clumps and thickets. The bird was reported to breed in the pandanus scrub and thickets during May or June to August and September. It can be very noisy at times.

Resident.

Gallixrex cinerea (Gmelin): Watercock. (Coolee-Kukulu)

1♀, Malé, North Malé Atoll, January 1957.

New record. The Watercock was reported to be more common in the more northerly atolls of the Maldives; it was said to breed during

June and July in the swamps around fresh, or brackish, water lagoons on some of the larger islands. Seldom seen on Malé Island where this specimen was collected.

Resident.

Chettusia gregaria (Pallas) : Sociable Plover. (Abulargee)

New record. Not observed by W.W.A.P. ; but small flocks were reported to visit the playing fields on Malé occasionally during the North-east Monsoon.

Irregular northern winter visitor.

Squatarola squatarola (Linnaeus) : Grey Plover. (Alaka)

1♀, Malé Island, North Malé Atoll, January 1957.

New record. A regular visitor seen usually singly or in pairs on the reefs of Malé and neighbouring islands during the North-east Monsoon.

Northern winter visitor.

Pluvialis dominica fulva (Gmelin) : Eastern Golden Plover. (Durrceen)

Gadow and Gardiner reported the presence of this species both in captivity and in the wild state. A single bird was brought in on 30 January 1957, having been snared about a week previously on the southern reef of Malé. During January, several were on this reef and it was reported that often small flocks visit the playing fields.

Northern winter visitor.

Charadrius hiaticula tundrae (P. R. Lowe) : Arctic Ringed Plover. (Findon)

1♂, Malé Island Atoll, December 1956.

New record. This specimen was the only one seen ; it was in company with a Lesser Sand Plover, *C. mongolus atrifrons*, on a patch of sand on the southern reef.

Irregular northern winter visitor.

Charadrius mongolus atrifrons Wagler : Lesser Sand Plover. (Findon)

1♀, Malé Island, North, Malé Atoll, December 1956.

New record. This specimen was the only one seen ; it was in company with an Arctic Ringed Plover, *C. hiaticula tundrae*, on a patch of sand on the southern reef.

Irregular northern winter visitor.

Charadrius leschenaultii Lesson: Large Sand Plover. (Bondun)

1♀, Dunidu Island, North Malé Atoll, December 1956.

New record. Several birds were seen on the southern reef of Malé Island. They were reported to visit Malé in small numbers during the North-east Monsoon.

Northern winter visitor.

Numenius phaeopus phaeopus (Linnaeus): Whimbrel.

2♂, 2♀, Malé Island, North Malé Atoll, December 1956 and January 1957.

Gadow and Gardiner regarded this species as common on Mahlosmadulu and Miladumadula atolls where birds were seen either singly or in small groups of three to four. They stated that it was a regular winter visitor to the Maldives from November to March. On North Malé Atoll it is one of the commonest winter visitors with flocks of up to 16 being seen by W.W.A.P. on the reef close to Malé Island.

Northern winter visitor.

Numenius arquata (Linnaeus): Curlew. (Bodu-Bulithumbi)

New record. One bird was definitely identified on the shore of Lankeumfurii Island, North Malé Atoll, on 6 February 1957. This was the only Curlew seen. Birds of this species were reported to be annual visitors staying in small numbers during the North-east Monsoon.

Northern winter visitor.

Limosa lapponica lapponica (Linnaeus): Bartailed Godwit. (Bulithumbi Elolly)

1♂, Malé, North Malé Atoll, December 1956.

New record. This specimen was snared on the southern reef; it was the only one seen. Birds of this species were reported to visit the islands annually in small numbers during the North-east Monsoon.

Northern winter visitor.

Tringa totanus eurhinus (Oberholser): Eastern Redshank. (Ratafy Elolly)

1♀, Malé, North Malé Atoll, December 1956.

New record. This specimen and another bird of the same species were seen on the southern reef. The species was reported to visit the islands annually in small numbers during the North-east Monsoon.

Northern winter visitor.

Tringa nebularia (Gunnerus) : Greenshank. (Chunchun Elolly)

2♂, Malé Island, North Malé Atoll, December 1956 and January 1957.

New record. Several birds were always to be seen on the southern reef, a flock of nine being counted on one occasion. An annual visitor generally arriving in moderate numbers in early December.

Northern winter visitor.

Tringa glareola Linnaeus : Wood Sandpiper. (Findon Elolly)

1♂, Malé, North Malé Atoll, December 1956.

New record. Several birds were observed, always singly, on the southern reef of Malé Island during December and January. It was reported to be an annual visitor in small numbers during the North-east Monsoon.

Northern winter visitor.

Actitis hypoleucos (Linnaeus) : Common Sandpiper. (Findon)

1♂, Hulule Island, North Malé Atoll, January 1957.

Gadow and Gardiner reported seeing birds of this species either singly or in small flocks of seldom more than six in number. Single birds are common on the shores and reefs throughout the North-east Monsoon ; some occasionally visit the interior of the islands.

Northern winter visitor.

Arenaria interpres (Linnaeus) : Turnstone. (Ratafy)

1♂, Malé Island, North Malé Atoll, December 1956.

New record. Plentiful, occurring in flocks up to 15 or more on the reefs throughout the North-east Monsoon. It is probably one of the commonest visitors to the Maldives.

Northern winter visitor.

Capella stenura (Bonaparte) : Pintail Snipe. (Durrceen Elolly)

1♀ Hulule Island, North Malé Atoll, December 1956.

New record. This specimen was shot from a wisp of six in a small swamp on Hulule Island, others were seen on the reefs on Malé. It was reported to be an annual visitor staying in small numbers during the North-east Monsoon.

Northern winter visitor.

Capella gallinago (Linnaeus) : Common Snipe

Gadow and Gardiner reported that this species bred on Addu Atoll ; but it is possible that it was confused with *C. stenura* which was the only snipe seen by W.W.A.P. when on Malé Island¹.

Status uncertain.

Erolia minuta (Leisler) : Little Stint. (Kirru Bondun)

1♀, Malé Island, North Malé Atoll, December 1956.

New record. This specimen and, on another day, one other bird were seen on the southern reef at low tide. Little Stints pass through Malé annually in small numbers and may be a passage migrant.

Northern winter visitor (? Passage Migrant).

Dromas ardeola Paykull : Crab Plover. (Tayrawa ; juv., Moola Lumbo)

1♂, Malé, North Malé Atoll, December 1956.

Gadow and Gardiner reported that this species was seen only in mid-December 1899, on Miladumadulu Atoll, where it was particularly common around Furnadu. Parties of five to six in number, however, were frequently seen on the southern reef of Malé by W.W.A.P. in December and January. On three occasions a juvenile was seen in the company of adults, but breeding had not been observed by the islanders. From the size of the juveniles, it would seem that they would have hatched about July or August.

? Resident.

Gelochelidon nilotica nilotica (Gmelin) : Gullbilled Tern. (Kirru Dooni Amma)

1♀, Malé Island, North Malé Atoll, December 1956.

New record. This species was seen occasionally over the reefs in the North Malé Atoll but much less frequently than other species of terns. It is reported to breed, together with the other species, on the sandbanks and islets during March and April but this statement requires confirmation.

? Resident.

Hydroprocne caspia (Pallas) : Caspian Tern

New record. Three birds were seen separately over the Cassanfarra reef, North Malé Atoll, on 30 November 1956.

Status unknown.

¹ The record of *breeding*, to whichever of the two species it may refer, is palpably erroneous. It must not be accepted without proof.—Eds.

***Sterna dougalli korustes* (Hume) : Eastern Roseate Tern. (Kirru Dooni)**

2♂, 2♀, Fugarde Island, North Malé Atoll, January 1957.

New record. This tern was frequently seen flying over the reefs or settled on the sandbanks, usually in company with *S. sumatrana*. It was reported to breed on Fugarde Islet during March and April together with other species of terns.

Resident.

***Sterna sumatrana mathewsi* Stresemann : Blacknaped Tern. (Kirru Dooni)**

3♂, 3♀ Fugarde Island, North Malé Atoll, January 1957.

Gadow and Gardiner regarded this species as being the most common tern occurring in the Maldives ; Gardiner saw large flocks from October to January. It was found by W.W.A.P. to be indeed most abundant ; it was reported to breed in very large numbers on Fugarde Islet and other sandy islets about March and April.

Like Audubon's Shearwater *P. lherminieri* it has, curiously, not been reported from Ceylon despite the fact that both breed in large numbers in the Maldives.

Resident.

***Sterna anaethetus* Scopoli : Bridled Tern. (Walla, or ?Walli)**

New record. Large flocks were seen over the ocean between Ceylon and the Maldives. In the Maldives it was reported to breed amongst other terns on Fugarde and similar islets during March and April.

Breeding visitor.

***Sterna fuscata* Linnaeus : Sooty Tern. (Walla, or ?Walli)**

New record. Large flocks were seen wheeling over the ocean between Ceylon and the Maldives. It was reported to visit the Maldives to breed during March and April.

Breeding visitor.

***Sterna albifrons saundersi* Hume : Little Tern. (Bondu, or Bondu-dooni)**

2♂, 1♀, Fugarde Island, North Malé Atoll, January 1957.

New record. Flocks of about 25 birds were often seen over the reefs or on the sandbanks in North Malé Atoll. It was reported to breed, amongst *S. sumatrana* and other terns, on Fugarde Island during March and April.

Resident.

Thalasseus bergii velox (Cretzschmar): Large Crested Tern. (Gar-dooni)

4♂, Hulule, Wehammanarfurri and Dunidu islands, North Malé Atoll, December 1956 and January 1957.

Gadow and Gardiner reported that this species was abundant during the period October to January. It was found by W.W.A.P. to be moderately plentiful over the reefs and around the islands in the North Malé Atoll, usually in small numbers or even singly. It was reported to breed on Fuarde Island amongst other terns during March and April.

Resident.

Thalasseus bengalensis bengalensis (Lesson): Small Crested Tern. (Iammuti Gar-dooni)

3♂, Tulargiri and Wehammanarfurri islands, North Malé Atoll, December 1956 and January 1957.

New record. Small numbers of this tern were frequently seen on the reefs around small islands in the North Malé Atoll. It was reported to breed on sandbanks and islets during March and April but this statement requires confirmation.

Resident ?

Anous stolidus pileatus (Scopoli): Common Noddy. (Maranga)

2♂, 2♀, Tulargiri and Minueofinol islands and reefs, North Malé Atoll, December 1956 and January 1957.

New record. The Common Noddy is plentiful throughout the North Malé Atoll. The birds feed both within and outside the main reefs usually in association with other terns. It was reported to be present throughout the year but breeding had not been observed. Many birds are netted at night for sale as food.

? Resident.

Anous tenuirostris (Temminck) : Lesser Noddy

Gadow and Gardiner reported that this species bred on the South Mahlosmadulu Atoll in November ; but it was not observed by W.W.A.P.

? Breeding visitor.

Gygis alba (Sparman): White Tern. (Cundu-Wallu-Dooni)

2 juv. ?, Addu Atoll, February 1957.

New record. The two juvenile specimens are too young for racial determination. It is possible that they belong to the same race as the Seychelles form, *monte* Mathews. They were brought in by the Hon. Mr. Ibrahim Ali Didi, the Prime Minister, who stated that the White

Tern breeds intermittently throughout the year on Addu Atoll but not elsewhere in the Maldives. The egg is laid on the branch of a tree or on a plantain (banana) leaf; the young survive because there are no predators on Addu Atoll. Even the House Crow *Corvus splendens* is absent from this southern atoll although it is present on most of the others.

Resident.

Psittacula calthropae (Blyth) : Emeraldcollared Parakeet

Gadow and Gardiner reported seeing a pair of birds, twice in January on Hulule Island, North Malé Atoll. The species was not seen by W.W.A.P. and parakeets are unknown to the islanders.

? Irregular visitor.

Eudynamys scolopacea scolopacea (Linnaeus): Koel. (♂, Karlukoel ;
♀, Dindin Koel)

2♂, 1 juvenile ♂, 3♀, Malé, North Malé Atoll, December 1956.

Gadow and Gardiner reported that koels were seen constantly during November and December on Mahlosmadulu, Miladumadulu, and Fadi-foli atolls while during January one pair was seen on Hulule Island, North Malé Atoll. W.W.A.P. found koels to be plentiful on Malé Island and received reports that apart from Addu (where the House Crow is absent) koels occur throughout the majority of the atolls. More adult males were seen than adult females. Eggs are laid in the nests of the House Crow *Corvus splendens maledivicus*. A female, shot on the 11th December, dropped a fully formed egg.

Resident.

Asio flammeus flammeus (Pontoppidan) : Shorteared Owl. (Bukka-moonu)

Gadow and Gardiner recorded this species on Goifurfehendu Atoll in October and on Miladumadula Atoll in December. It was not observed by W.W.A.P. ; but it was reported to visit Malé and neighbouring islands occasionally during the North-east Monsoon, sometimes in moderate numbers.

Irregular northern winter visitor.

Collocalia brevirostris (Horsfield) : Edible-nest Swiftlet. (Forika)

New record. One swiftlet was seen on the morning of 19 December 1956 flying around a clump of mango trees close to the Guest House at Malé. It flew comparatively low when hawking for insects so it was identified with certainty. As there are no caves or tunnels in the Maldives suitable for breeding it was, presumably, a straggler.

? Straggler.

Hirundo rustica gutturalis Scopoli : Eastern Swallow. (Forika)

1♂, Malé Island, North Malé Atoll, December 1956.

New record. Although only one bird was collected several were seen during December; on two occasions two were seen flying together over the harbour breakwater. It was reported to visit the island annually in small numbers during the North-east Monsoon.

Northern winter visitor.

Delichon urbica (Linnaeus) : House Martin. (Forika)

Gadow and Gardiner reported that a number of martins arrived over Hulule Island at the end of January, also others were to be seen over Malé throughout February. However, martins were not observed by W.W.A.P. but it was reported to be an irregular visitor during the North-east Monsoon.

Irregular northern winter visitor.

Anthus trivialis trivialis (Linnaeus) : Tree Pipit. (Fanfoudune)

1♀, Malé Island, North Malé Atoll, December 1956.

New record. For further notes see under *Anthus cervinus*. It is curious that this species has not yet been recorded from Ceylon for it occurs in southern India and now, on the evidence of this specimen, also in the Maldives.

? Passage migrant.

Anthus cervinus (Pallas) : Redthroated Pipit. (Fanfoudune)

1♂, Malé Island, North Malé Atoll, December 1956.

New record. This species does not normally migrate southwards through peninsular India, so it is possible that this bird was carried south-westerly across the Bay of Bengal by the North-east Monsoon. During December three pipits were seen of which two were collected, this specimen and another listed as *A.t.trivialis*. Pipits are well known on Malé where they visit the playing fields and grazing grounds. They were reported to arrive annually in small numbers during December but pass on after a few hours or, maybe, a day or so.

? Passage migrant.

Motacilla flava Linnaeus : Yellow Wagtail. (Fanfoudune)

New record. Not seen on Malé but in April one bird came on board a ship 45 miles south of Addu Atoll. Birds of this species were reported to arrive annually in Malé in small numbers during November and December. While on Malé they remain near the playing fields and the

foreshore grazing grounds but soon pass on southwards after a few hours or perhaps even several days. Sometimes they are seen during March and April on their return flight.

Passage migrant.

Corvus splendens maledivicus Reichenow : House Crow. (Karlu)

2♂, 2♀, Malé Island, North Malé Atoll, December 1956.

Reichenow (1904 : 356) separated this race on colour differences between one specimen from Suvadiva Atoll, southern Maldives, and a series of House Crows from India, unfortunately without referring to birds taken in Ceylon. In colour the series now under consideration and two other specimens from the Maldives already in the British Museum (Natural History) differ but little from *proiegatus* Madarasz of Ceylon and then only in the grey of the nape and neck being almost imperceptibly clearer in tone. The racial separation, however, can be upheld on size, the Maldivian bird, in series, being larger than birds from Ceylon.

Measurements (in millimetres) of *Corvus splendens*

	Ceylon		Maldives	
	Males	Females	Males	Females
No. of specimens	5	7	3	3
Wing (mean)	225-275 (244.8)	219-255 (236.5)	262-274 (268.0)	256-269 (263.0)
Tail (mean)	147-156 (152.5)	128-149 (138.1)	158-172 (165.0)	158-168 (162.6)
Culmen (mean)	46-49 (47.4)	42-45 (42.6)	50-54 (52.0)	47-49 (47.0)

Three specimens, including one juvenile, from the Laccadives were also examined and were found to be nearest to the nominate form in colour and size. It seems that there may be a slight colour difference between birds of this population and those from peninsular India but, if there is, its significance cannot be assessed until longer series are available for study. Meanwhile, it is advisable to continue to list the population on the Laccadives as *C.s.splendens* Vieillot.

Gadow and Gardiner stated that this species breeds in the Maldives between May and September, that is, during the South-west Monsoon. A pair were building 30 feet up in a mango tree in the Guest House compound on 5 December 1956 and another pair were seen building on